



# National Significant Wildland Fire Potential Outlook

## Predictive Services National Interagency Fire Center

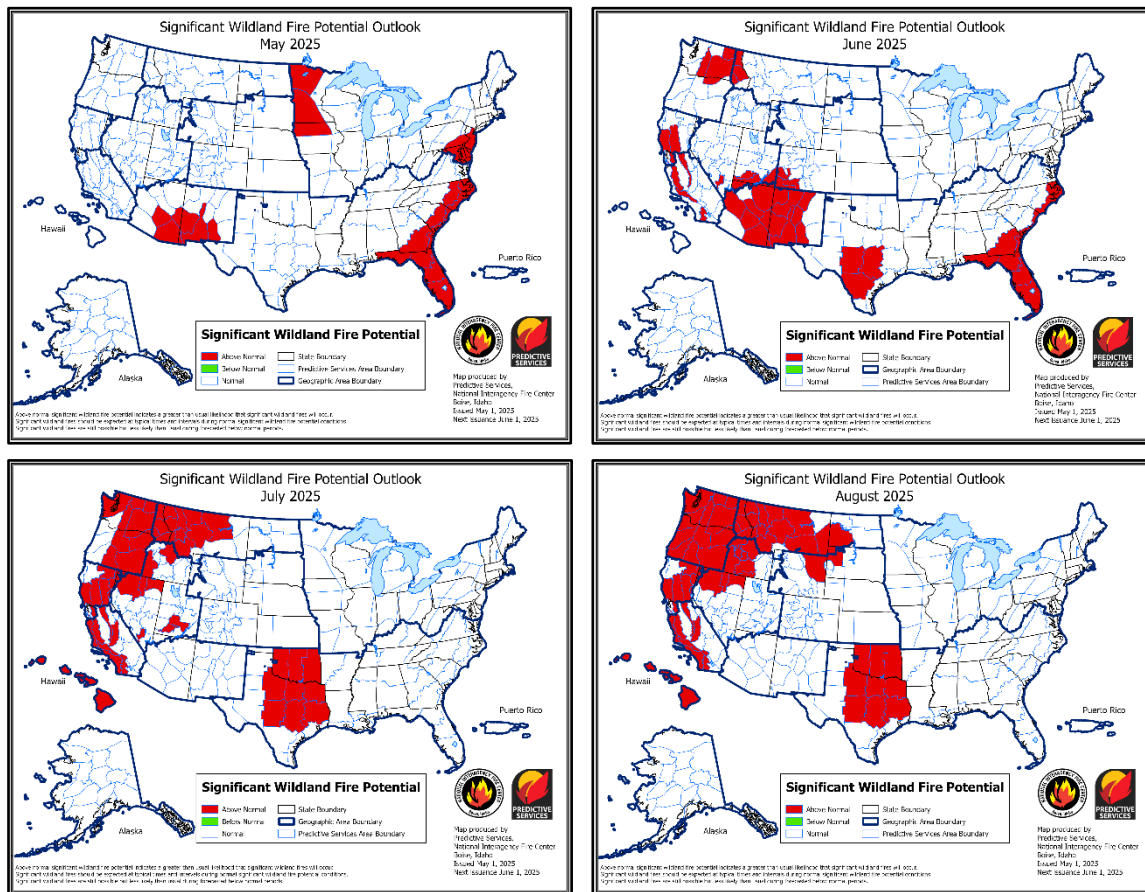


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Next Issuance: June 1, 2025

Outlook Period – May through August 2025

### Executive Summary

The significant wildland fire potential forecasts included in this outlook represent the cumulative forecasts of the ten Geographic Area Predictive Services units and the National Predictive Services unit.



Fire activity decreased to low levels across the US at the beginning of April with the national preparedness level returning to one (on a scale of 1-5) April 4. The Southern Area, which was the most active geographic area in March, saw a significant decrease in activity at the beginning of the month. However, the last ten days of April have seen a modest increase in activity across the Southern, Eastern, and Southwest Areas. Total acres burned through April of this year is 108% of the 10-year average, with an above average tally of wildfires of 147%.

April precipitation was above normal across the eastern plains of New Mexico through North Texas and Oklahoma into the Ohio Valley. However, precipitation was below normal in much of the West, South Texas, Florida, and the southeast Atlantic coast. Slightly above normal precipitation occurred in the southern Appalachians, New England, and northern Plains, with slightly below normal precipitation in Nebraska and portions of the Great Lakes. Drought expanded and intensified across the Southwest the past month, with drought also intensifying in

Florida. Drought improvement occurred in portions of the Mid-Atlantic and New England but persisted across much of the Plains.

Climate Prediction Center and Predictive Services outlooks issued in late April indicate above normal temperatures are likely across much of the US through August, with the West, Northeast, southern Plains, and Gulf Coast most likely to be above normal. Drier than normal conditions are expected across the northern half of the West and much of the Plains May through August, as well. Above normal precipitation is most likely along the Gulf and East Coasts through August, with above normal precipitation likely in the Southwest over the summer due to the North American Monsoon. Warmer and wetter than normal conditions are likely in Alaska through August.

Above normal significant fire potential is forecast across southeast Arizona, southwest New Mexico, western Minnesota, the Mid-Atlantic, Florida, and the southeast Atlantic coast in May. Normal potential is forecast elsewhere across the US in May. In June, potential will return to normal in the Mid-Atlantic and Minnesota, while above normal potential will continue along the immediate southeast Atlantic coast and Florida. Above normal potential will expand across much of the Southwest into portions of southern Nevada, southern Utah, and southwest Colorado. Above normal potential is also expected across portions of central and southern California in June, as well as eastern Washington into the Idaho panhandle and portions of central Texas. In July, above normal potential will expand across much of central and east Texas into Oklahoma, while potential returns to normal in the Southwest. Above normal potential will continue in portions of southern Nevada and Utah in July, but expand across more of California, as well as much of the Northwest, northern Great Basin, the Idaho panhandle, and western Montana. In August, above normal significant fire potential will cover much of the northwestern US into portions of the northern Plains and much of California. Above normal potential will continue in central and east Texas and much of Oklahoma in August, as well. Alaska will have normal potential through the period while above normal potential is forecast for the lee sides of Hawai'i in July and August.

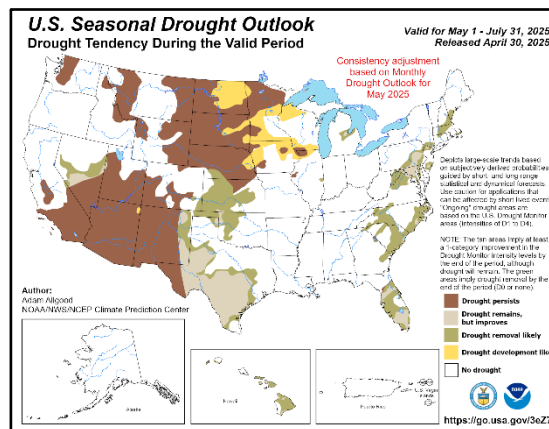
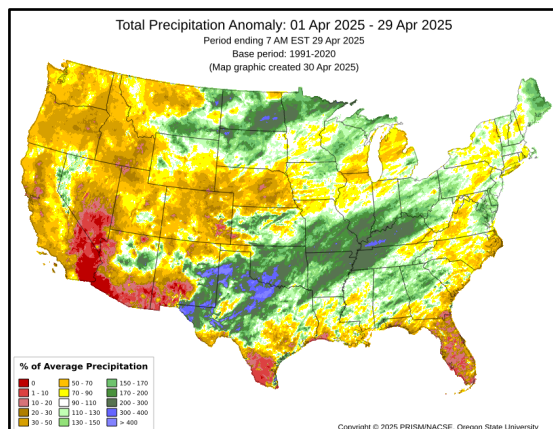
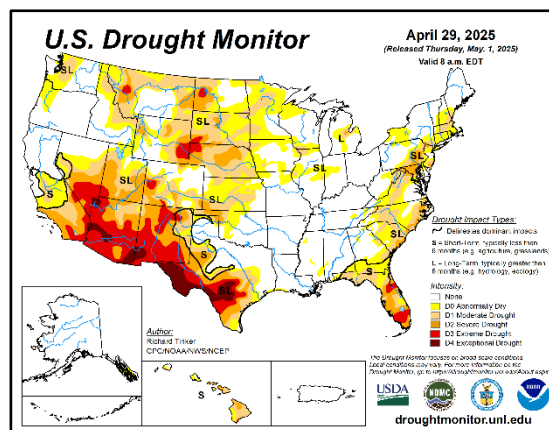
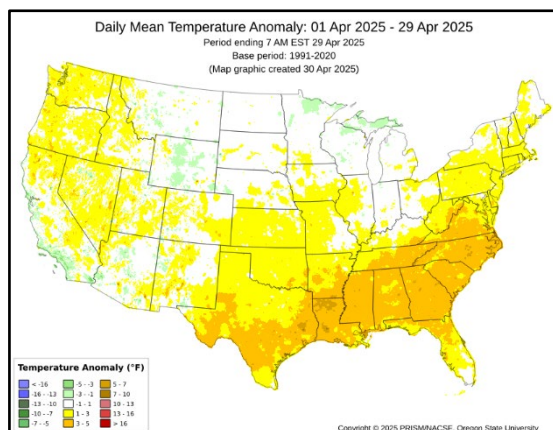
### ***Past Weather and Drought***

Temperatures in April were above normal across the southern Plains into the Southeast. However, temperatures elsewhere across the US were generally near normal, except for portions of the Northwest, northern California, and the Great Basin which were slightly above normal. Temperatures were above normal for southeastern Alaska for April, but slightly below normal in western Alaska for April. Temperatures across Hawai'i were slightly above normal, with the warmest anomalies across the eastern half of the Big Island.

Precipitation across the US in March was above normal from eastern New Mexico through central and north Texas into Oklahoma, the Mid-Mississippi, and Ohio Valleys. Smaller areas of above normal precipitation were noted in northern Arizona, the northern Plains, Southeast, Mid-Atlantic, and Maine. Well below normal precipitation was observed in South Texas and much of Florida, with below normal precipitation across most of the West and the Carolina coast, as well. The well above normal precipitation in the Ohio Valley was mainly due to a major rain event April 3-6, when up to a foot of rain fell from portions of eastern Arkansas into western Tennessee and Kentucky causing widespread flooding. Precipitation in Hawai'i below normal on the eastern half of the Big Island, but above normal for O'ahu and Kaua'i, while above normal precipitation occurred across most of Alaska. Snowpack across the western US has been melting faster than normal due to the drier and slightly warmer than normal conditions, with most basins reporting below normal snowpack for the end of April. Only the basins in far northern California and southern Oregon are reporting above normal snowpack at the end of the month.

Fire activity moderated across the Southern Area significantly at the beginning of the month due to precipitation falling across the southern Appalachians. Fire activity elsewhere across the US remained at low levels for the first half of the month. However, fire activity began to increase the

latter half of the month in the Eastern, Southern, and Southwest Areas. In the Southern Area, fire activity increased the most in Florida, with other increases in the southern Appalachians after dry conditions returned, and the eastern Carolinas. Activity in the Eastern Area increased in Minnesota as well as the Mid-Atlantic and New England, with the Jones Road Fire in New Jersey consuming over 15,000 acres after emerging April 22. The increase in activity in the Southwest was more subtle and focused mainly on southeast Arizona and southern New Mexico.



**Left: Departure from Normal Temperature (top) and Percent of Normal Precipitation (bottom) (from PRISM Climate Group, Oregon State University). Right: U.S. Drought Monitor (top) and Seasonal Drought Outlook (bottom) (from National Drought Mitigation Center and the Climate Prediction Center).**

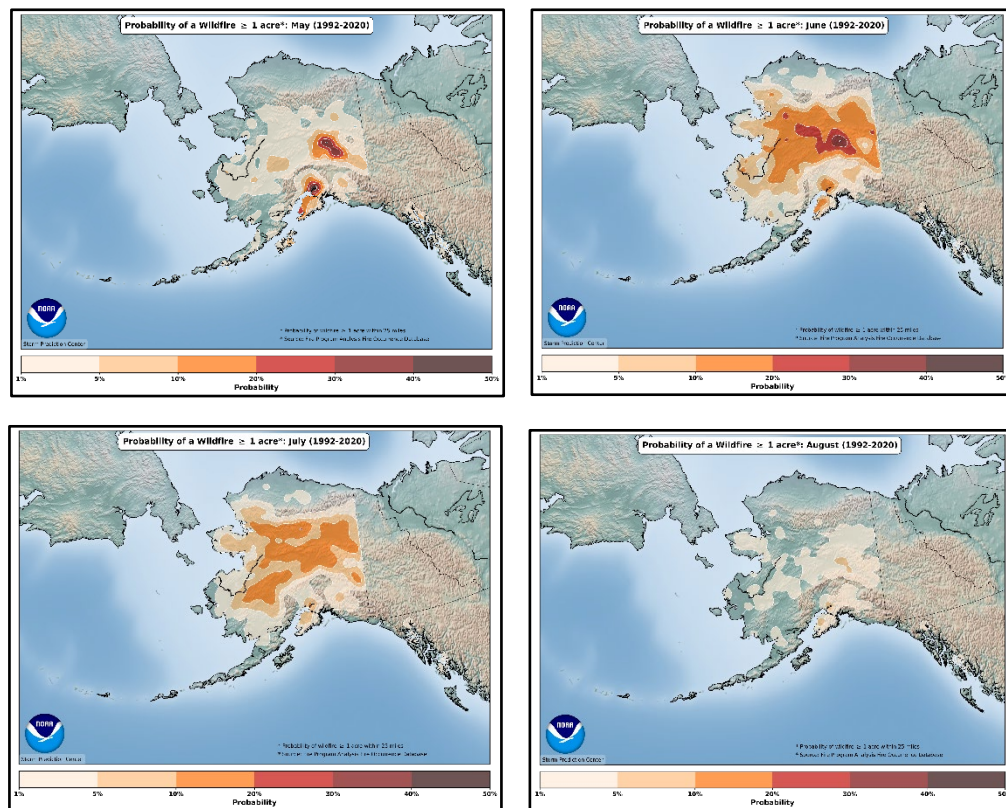
Overall drought decreased across the US since late March with just nearly 37% of the US in drought as of April 29, a decrease in area of almost 8%. Drought expanded and intensified across the Southwest, southern Great Basin, and West Texas. Drought improved from north Texas into eastern Kansas, as well as much of the Midwest, but persisted in the northern Plains. Drought also improved across portions of New England, the Mid-Atlantic, and southern Appalachians, but intensified across the Florida peninsula. Extreme drought expanded in the southwestern US and now covers portions of southeast California, southern Nevada, southern Arizona, southern New Mexico, and southwest Texas. Smaller areas of extreme drought are noted in portions of Florida, Wyoming, the western South Dakota-Nebraska border, western Montana, and western North Dakota. Exceptional drought has expanded across portions of southern Arizona, southwest New Mexico, and southwest Texas.

## Weather and Climate Outlooks

La Niña has ended with El Niño-Southern Oscillation (ENSO) neutral conditions observed in the equatorial Pacific Ocean. The Climate Prediction Center is forecasting ENSO neutral conditions to continue through the summer, with a greater than 50% chance of neutral conditions continuing into early fall. However, significant uncertainty exists for the ENSO forecast for the fall due to the spring predictability barrier. The negative phase of the Pacific Decadal Oscillation (PDO)

continues to weaken and is likely to be less of a factor for this outlook. The Madden-Julian Oscillation (MJO) was active over the winter but has weakened and is expected to remain weak for the next month. The ENSO neutral conditions will continue to be the main driver of this outlook, with limited effects from the PDO and MJO.

## Geographic Area Forecasts



**Normal fire season progression across Alaska shown by the probability of a fire greater than 1 acre within 25 miles. Fire severity cannot be inferred from this analysis.** (Based on 1992-2020 FPA Data. Analysis courtesy of the Storm Prediction Center.)

## Alaska

Despite a low snow year in the southern half of the state, ample precipitation has kept surface fuels damp, so that Alaska is slowly entering fire season as May approaches. Normal fire potential is expected throughout the spring and summer statewide.

The US Drought Monitor identifies an area around most of the panhandle as abnormally dry, with all other areas normal. There is still snow across much of the Interior and northern portions of the state, though it will melt quickly, leaving most fire-prone areas snow free by mid-May.

The Climate Prediction Center indicates the likelihood of warmer and wetter than normal conditions for most of Alaska this summer. Though the warmer than normal forecast is likely due to recent trends, the skill for long term precipitation prediction in Alaska is low and is difficult to anticipate more than a week or so in advance.

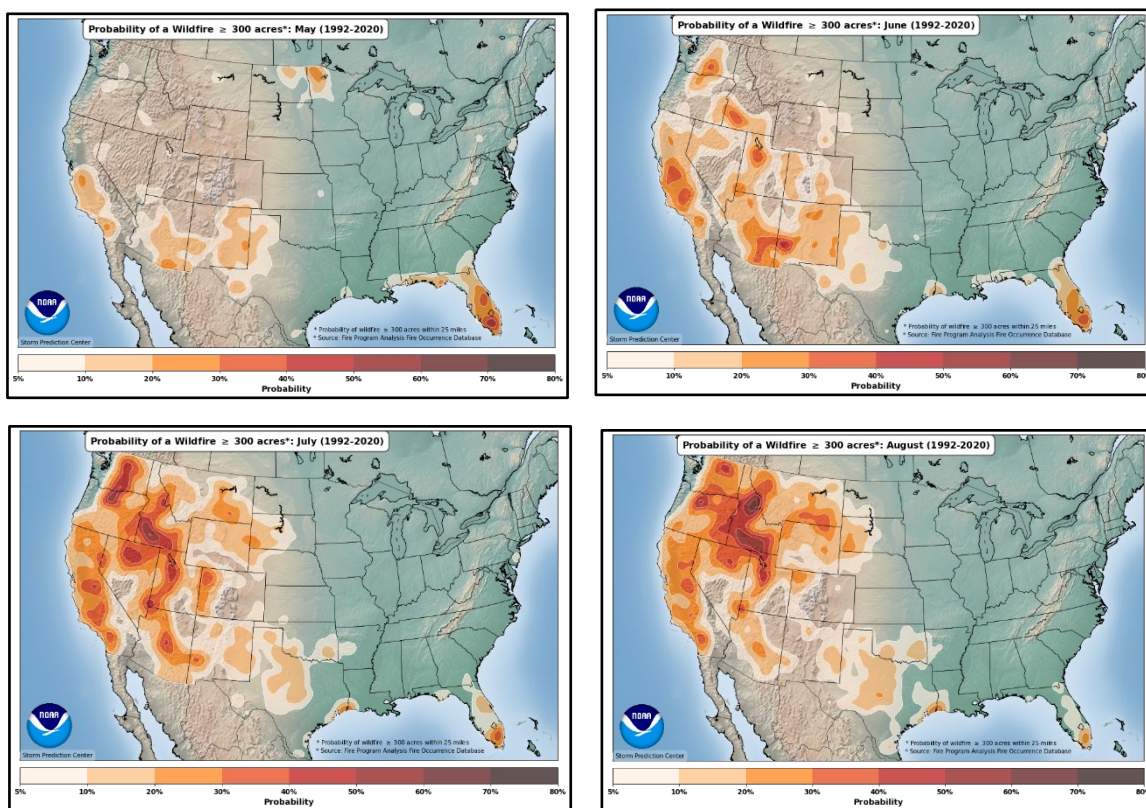
There have been a handful of fires on the Kenai Peninsula and in the Matanuska Valley throughout April, and a few fires have popped up in the Tanana Valley in the last half of the month. These have all been human caused, due to escaped burn piles, barrels, or house/vehicle fires. With people focusing more on spring cleanup as temperatures warm, it is likely that escaped



burns will become a bigger problem along the road corridors. If the timing of a wind event coincides with any such fires, they will become a big but short-term concern.

Fuels are snow free in much of southwest, south-central Alaska, and the panhandle. North of the Alaska Range and in the west, fuels are emerging from their winter snowpack, particularly along the Tanana Valley. Expect most areas across the Interior to be snow free by the middle of May, which is typical. Though much of the south was free of snow early this spring, there has been enough rain to keep fuels from drying in the duff layers, confining any activity to surface fuels. This means that May will start out with normal fuel conditions across Alaska.

Alaska is moving into fire season. Human-caused fires are becoming more likely along the road corridors of the south and into the Interior. With typical fuel conditions at the end of April, Alaska is anticipating a normal start to fire season. Activity will gradually increase throughout May as most areas go snow free and surface fuels dry. By late June and early July, activity will reach its peak as lightning coincides with long summer days that warm and dry the mid and deep duff layers. By August, end of season rains gradually end the season as daylight hours shorten and sun angle lowers.



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**Normal fire season progression across the contiguous US shown by the probability of a fire greater than 300 acres within 25 miles. Fire severity cannot be inferred from this analysis.** (Based on 1992-2020 FPA Data. Analysis courtesy of the Storm Prediction Center.)

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## Northwest

The Northwest Geographic Area (NWCC) is expected to experience average significant wildfire potential in May, aligned with typical annual cycles. Slightly above-average activity may occur in areas with short-term drought, particularly in eastern Washington and eastern Oregon. Significant fire potential conditions are expected to worsen areawide as summer progresses.

Periodic weather systems brought cooler conditions and brief, localized rainfall, but consecutive days of significant rainfall were rare. Temperatures were near average, while precipitation across numerous areas of Oregon and eastern Washington was less than 50% of normal.

Regional snowpack peaked in late March and declined through April. Aggressive snowmelt from near-record levels in the southern Blue Mountains caused flooding in Burns, Oregon along the Silvies River. Oregon's snowpack remains 130–160% of median values and primarily above 5,000 feet, while Washington's snowpack lags significantly.

The US Drought Monitor shows little change since late March. Most of Oregon and Washington remain drought-free, though moderate drought persists from the Washington Cascades west to the Puget Sound.

Initial attack activity remained minimal across the geographic area in April. A couple of pre-green-up fires occurred in northeast Washington, with the largest reaching 150 acres but was contained within a single burn period. Prescribed fire operations continued where conditions permitted.

Energy Release Component (ERC) increased significantly during the latter half of April across the Northwest. Most Predictive Service Areas (PSAs) reported ERCs at or above average levels for this time of year, except for south-central Oregon. Green-up is advancing in lower elevations west of the Cascades and is spreading eastward. However, drier rangeland fuels east of the Cascades present an elevated potential for single-day burn events, particularly in areas where green-up is lagging and conditions align with wind and slope.

Central Pacific sea surface temperatures are near average, with ENSO-neutral conditions expected to persist through September. Below-average precipitation is forecast for Oregon, with no strong signal for Washington. Precipitation confidence weakens for August, particularly west of the Cascades. Forecasts suggest a higher likelihood of above-average temperatures (40–60%) from late May through August, with the highest probabilities in southeast Oregon. The North American Monsoon remains an unknown factor, with current predictions keeping the much of the moisture east of NWCC. This favors below average lightning activity in the NWCC.

Lightning activity remains uncertain. While near-average lightning activity occurred last year despite similar Climate Prediction Center outlooks and minimal monsoon influence, human-caused fires rose above pre-COVID averages, a trend likely to continue this year. This ultimately results in all NWCC being placed in above average significant fire potential by August.

To summarize, normal (low) significant fire potential is forecast in May. For June, PSAs NW05, NW09, and NW10 in eastern Washington were elevated to above normal fire potential due to existing fuel dryness. For July, above normal significant fire potential is forecast for nearly all PSAs, except far southwest Washington and western Oregon. By August, the entire region will have above normal significant fire potential as seasonal dryness accelerates.

## **Northern California and Hawai'i**

Significant fire potential is projected to be normal for May and near to above normal for June through August. Historically, one or less large fire occurs per Predictive Service Area (PSA) during May. During June, generally 1-3 large fires occur per PSA except for the North Coast and Far Eastside which is less than one. During July and August, generally 1-4 large fires occur per PSA except for the North Coast which is less than one. Hawaii's significant fire potential is normal for May and June and above normal for the leeward sides during July through August.

The atmospheric flow during April consisted of high amplitude ridges and troughs including split jet stream patterns. Despite some unsettled weather periods, precipitation ended up below normal across most areas with just a couple small patches of above normal precipitation across the east. There were no notable atmospheric river events, and the most impactful wetting events occurred during the first week of April. Average temperatures were near to above normal. A little over 2,200 lightning strikes were recorded through April 27, exceeding the 2012-2022 April average of nearly 1,700 strikes. There was a healthy mix of both northerly and onshore wind events, but the northerly variety brought much lower relative humidity. There was a total of five northerly and/or offshore wind event periods that brought relative humidity into the teens and 20s across portions

of the area.

Dead fuel flammability was changeable which is typical of April. Dead fuels started out and ended the month moist, with drying in between. The regional Energy Release Component (ERC) value started out below normal through the first half of the month then shifted to above normal during most of the second half before trending below normal the last few days. The most changeable conditions were found near the coast due to onshore versus offshore influences. The Far Eastside PSA experienced above normal ERC readings most of the month. The North Coast and Far Eastside PSAs breached the 60<sup>th</sup> percentile value during April, although critically low dead fuel moisture values were not observed. The green-up process in live fuels continued to progress further up the slopes during April, with various stages of woody fuel green-up as high as 5,000 feet by the end of the month. Some unusually high values were sampled for the time of year across the east indicating an early start to the mid elevation growing season. Herbaceous fuels also experienced a transition with a new crop of cheat grass forming as high as 6,500 feet across the east. The cool season grasses were in various stages of green-up at or below 5,000 feet west of the Cascade-Sierra Crest. Herbaceous fuels found in the fully exposed and/or thin soil areas started to show signs of curing during the latter half of the month below 1,000 feet. Snow cover began to erode more uniformly as April progressed with most snow in the sheltered areas generally found above 5,500 to 6,500 feet by the end of the month. Moisture found within the snowpack ranged between 90-120% of normal on April 1 but had dropped to 70-80% of normal April 25. Drought conditions remained absent across northern California during April. The 1-month evaporative demand drought index (EDDI) value on April 23 showed no clear short-term drought impacts across northern California.

Wildfire business increased during April compared to March. The daily wildfire average rose to nearly four compared to around two observed during March. The April 2008-2024 daily average is a little under four. Individual fire growth also increased with several fires in the 1-to-10-acre class. The largest observed fire was found northwest of Crescent City, near the coast, and grew to 37 acres. Prescribed burning increased as the month progressed with several broadcast burns conducted during the latter half of the month.

Atmospheric patterns during May will likely mimic April to a certain degree although outcomes are likely to be different. Precipitation anomalies should be mixed with a tendency for near to above normal precipitation east of the Cascade-Sierra Crest and likely below normal west of the Crest. Temperature anomalies should also be mixed although many of the 30-day modeling outputs suggest a broad area of cooler than normal anomalies due to extended troughing periods. The switch is expected to flip towards warmer and drier than normal during June through August, although periods of extended onshore flow should moderate conditions near the coastal areas. The North American Monsoon thunderstorm season is expected to start on time, if not a little earlier than normal, across the Desert Southwest and is expected to be unusually active. This could portend some moisture and lightning surges northward during July and August, although the main influx of moisture is expected to be farther east and south. A little more of a monsoon influence is expected this summer compared to last summer across northern California, although impactful wind and heat events should outnumber impactful lightning events.

Based on the current fuel state and future weather predictions, normal significant fire potential is projected for May and near to above normal for June through August across large portions of the interior. May will represent a transition period for the interior low elevation areas due to modest growth followed by herbaceous curing and dry wind periods. However, the live woody fuels are not likely to contribute much to the spread in May. Extended periods of critically low fuel moisture are expected away from the coastal influences June through August. The low fuel moisture is likely to coincide with a healthy mix of heat waves, dry wind events, and moderate amounts of lightning. The grass crop west of the Cascade-Sierra Crest is likely to be above normal once again and will be mostly cured across the lower elevations during June. Cheat grass should be cured across the east, especially as July progresses, and combine with heightened Burning Index periods to promote large fire activity there.

There will be some initial fire-resistant spread barriers early in the season such as the upper elevation snowpack and transitional mid elevation green-up, although the snowpack should come off earlier than normal this year and is expected to be mostly gone by late June. A flash drought is also a likely possibility this summer and should be most stressful to the interior live fuels during July and August. The fire environment should be suitable for extended prescribed burn periods during May although a quick transition towards unseasonably flammable dead fuel conditions is likely to limit prescribed burning during the summer.

Sea surface temperature (SSTs) anomalies surrounding the Hawai'ian Islands were above average during April. Average temperature anomalies were generally near to above normal although some cooler anomalies were found across the Big Island. Precipitation anomalies were mixed with significant precipitation observed in areas from April 16-18 and across the northern tier of islands April 22 and 23. Measurable snow was also observed across the high country of the Big Island April 17 and 18. The islands experienced mixed trends in drought coverage and severity with improvements observed across Kaua'i and O'ahu by the third week of April, while Moloka'i south experienced an increase in drought. Herbaceous fuels across the leeward sides experienced some noticeable green-up due to areas of abundant precipitation observed during April and are in a mixed phase. No National Weather Service Red Flag Warnings were issued and there no notable wind events. The most significant hot spot detections from satellites were the result of a prescribed burn conducted in the Schofield Barracks area of Oahu mid-month.

The El Nino Southern Oscillation (ENSO) has transitioned to a neutral state. Average temperatures during the next four months should generally be above normal. Precipitation during the dry season should take on a mixed anomaly flavor. The northern islands should tend towards near to above normal precipitation while the southern tier of the islands, especially the Big Island, tend near to below normal. The precipitation returns remain a wildcard and will help to alter the herbaceous state across the leeward sides. The drought signal is likely to fluctuate although the Big Island and Maui have the highest likelihood of maintaining or intensifying drought conditions providing stress on the live fuels. The herbaceous fuel loading is also likely to be less compared to the last two years. Based on the weather projections and current state of the fuels, normal significant fire potential is expected for May and June and above normal has been assigned to the leeward sides from Moloka'i south during July and August.

## **Southern California**

Since the start of the water year, October 1, central and southern California experienced significantly below average precipitation. The driest anomalies are across eastern San Bernardino and Riverside Counties as well as all Imperial County. April also remained significantly drier than average across central and southern California, with the driest anomalies in the southern and eastern portions of the geographic area. A wide variance of temperature anomalies was observed for April with much of the southern coast 1-2°F below normal, while much of the Central Valley was 2-4°F above normal.

The El Niño Southern Oscillation (ENSO) is in a neutral state as sea surface temperature (SST) anomalies have warmed above -0.5°C in the equatorial Pacific. Cooler than normal SST anomalies remain off the California coast in the eastern Pacific.

The US Drought Monitor shows areas of moderate drought extending across portions of the Central Valley. Severe and extreme drought persist across the southern coast and in the deserts of southern California.

Recent rain on April 26 resulted in live and dead fuel moisture increasing and energy release component (ERC) decreasing across the region. Live fuel makes up the largest portion of the total fuel load in southern California. The recent rain at the end of the month is likely continue green-up for the foreseeable future. However, drier conditions become more likely as we transition into



the summer months. The more recent rains have also resulted in an increased yield of grass and fine fuels. The long-term dry trends allow for less moisture in the larger live fuel types such as timber.

Climate models suggest ENSO neutral conditions will continue through the rest of the spring and through the summer. Cool SST anomalies off the California coast are likely to allow for a stronger than normal marine layer for May. Confidence in the persistence of the marine layer decreases in June, combined with ensembles showing a higher probability of below normal precipitation during the summer months.

Given all these factors, the odds favor near-normal large fire potential for May across all 16 Predictive Service Areas (PSAs).

With the marine layer less likely to persist and a decreasing trend forecast in June, combined with the dry long-term trends, above normal large fire potential is favored for the Central Coast Interior, Sierra Foothills, Western Mountains, and Southern Mountains PSAs. Given the recent increased grass crop combined with a drier forecast for June, it is likely that some grassland areas farther away from the coast could begin to cure. For the mountain areas, the below normal snowpack and long-term dry conditions are likely to result in lower live fuel moisture content for larger fuels such as timber.

For both July and August, above normal significant fire potential is favored for the Sierra Foothills, Southern Sierra, Central Coast Interior, Central Coast, Western Mountains, Eastern Mountains, Southern Mountains, and South Coast PSAs. The marine layer is likely to decrease its influence during July and August which would allow for grassy areas closer to the coast to cure. Increased drying across the mountain PSAs will result in drying of the timber fuel types, as well. These factors contribute to above normal significant fire potential. Any large fires across the lower lying areas are expected to be primarily grass and brush dominated, while any fires in mountainous areas are expected to be timber dominated.

## **Northern Rockies**

Significant wildland fire potential in the Northern Rockies Geographic Area (NRGA) is expected to be normal for May. Above normal potential is forecast for north Idaho in June with the rest of the NRGA remaining normal. In July, above normal potential will expand from north Idaho into western Montana and the northern half of central Montana, with normal potential maintained over the rest of southern and eastern Montana and North Dakota. For August, above normal potential will extend eastward across southern Montana into southwest North Dakota, while normal potential covers northeast Montana, northern and southeast North Dakota, and Yellowstone National Park. Seasonal forecasts lean above normal for temperatures and below normal for precipitation for May, June and July, which are a large portion of the wet season in the NRGA. Missing precipitation this time of year is strongly associated with elevated significant wildland fire potential.

Several cold fronts have moved across the NRGA and kept temperatures normal or slightly below normal for April. This has resulted in the near normal snowpack melting at a slow pace, though precipitation during the month has done little to augment the existing snowpack at higher elevations. Below normal precipitation has been observed over north Idaho and southwest Montana and central Montana. Above normal precipitation has fallen over much of North Dakota and south-central Montana with close to normal values over other areas. The most significant weather event was a cold front April 11-13, with breezy and warm conditions ahead of the front and strong winds behind the front with little precipitation.

Drought shifted one to two categories drier over northern Montana east of the Continental Divide and in a small portion of western North Dakota with no changes over Idaho. Abnormally dry to moderate drought covers north Idaho and western Montana with an embedded area of severe to

extreme drought over west-central Montana centered around Powell County. Central Montana is reporting no drought in the southern portion and abnormally dry in the north. Eastern Montana and western North Dakota report moderate to severe drought, with an area of extreme drought mostly over McKenzie County, North Dakota. The northern two thirds of eastern North Dakota is reporting no drought while the southern third of central and eastern North Dakota reports abnormally dry to moderate drought.

Fuels across the NRGAs reflect varied conditions by elevation and region. High elevations are reporting near normal snowpack for this time of year. The greatest deviations from normal 100-hour dead fuel moisture are across northern Idaho into northwest and north central Montana with values 3% lower than normal for late April. Green-up is likely ahead of schedule in northwest Montana and north Idaho. The remainder of the NRGAs does not show strong dead fuel anomalies.

Six large fires greater than 100 acres were reported in April with three of the fires in North Dakota exceeding 3,000 acres. Most of the large fires burned during the April 11-13 wind event. April also featured windows for prescribed fire throughout the month.

Long term weather projections for May lean toward above normal temperatures and below normal precipitation for the southern half of the NRGAs, spreading to the entire NRGAs during the summer months. Global weather conditions and expected seasonal patterns this spring into summer are similar to significant fire years. Current drought signals indicate multiyear precipitation deficits could yield the greatest impact over the western portion of the NRGAs, while the hottest and driest conditions of summer are expected over central portions of the NRGAs. The greatest uncertainty over the severity of the upcoming fire season relates to the monsoon, which might not provide as much mid-summer relief compared to the previous three years. Above normal significant wildland fire potential is expected to develop in north Idaho in June spreading eastward through Montana in July and August, possibly reaching southwest North Dakota.

## **Great Basin**

Fire activity is expected to be normal heading into May as periods of cooler temperatures and precipitation continue across the area. Some lower elevation fires may pop up at times on windy days after prolonged dry periods. Fire potential is expected to increase to above normal over portions of southern Utah, the Arizona Strip, and southern Nevada by June, mainly in the higher elevations where drought has intensified over the past year. These drought conditions have also led to a below normal fine fuel crop in lower elevations in these same southern areas, where fire conditions should remain normal. The North American Monsoon is expected to start a little later than normal this year due to the cooler and wetter springtime conditions, which in turn, delays the formation of the semi-permanent "Four Corners High" which drives the monsoon circulation pattern. Therefore, higher elevations in southern areas are expected to continue to have above normal fire potential in July, although areas farthest south may get enough monsoon precipitation in July to return to normal. For July and August, concern shifts northward to northern Nevada and Idaho. Fine fuel carryover is expected to be above normal in the lower elevations. Meanwhile, despite the healthy winter snowfall, forecast prolonged warm and dry conditions will bring the higher elevations of Idaho into play by August, with above normal potential forecast.

Temperatures overall in April were cooler than normal in most areas. However, precipitation was lower than normal in most areas, as well. In addition, seasonal precipitation since October 1 was below normal across much of the Great Basin, except for far northwest Nevada and southwest Idaho. The spring snowpack maximum was near normal over the northern half of the Great Basin, and just above normal over portions of northwest Nevada and southwest Idaho. The southern half of Utah, southern Nevada, and the Arizona Strip had much below normal snowpack. Drought continues to increase across the southern half of the Great Basin with severe to extreme drought across much of southern and eastern Nevada, western Utah, and the Arizona Strip. Moderate drought covers the rest of the southern half of the Great Basin, with pockets of moderate to severe drought in northern Utah, western Wyoming, and the Salmon-Challis National Forest in Idaho.

The only areas of the Great Basin with no drought are in northern Nevada and southern and western Idaho. Drought will likely persist and worsen in areas of existing drought.

Green-up is fully underway across most valleys of the Great Basin. Dried, dormant, carryover grasses will still be abundant over southern Idaho, northern Nevada, and parts of northwest Utah. Prolonged dry periods followed by strong winds could still pose a brief localized wildfire risk in these areas the next several weeks. Fire danger indices indicate higher fire danger than normal for the time of year in southern areas due to the preceding very dry weather. However, these levels are not yet critical. Moisture moving through in early May will allow fire danger to moderate regionwide.

Fire activity remains low across the Great Basin with ongoing prescribed burning. However, low elevation fires in Nevada, Utah, and southern Idaho occur occasionally, with some growing to 20–80 acres on windy days.

The weather pattern is becoming more active again heading into the first half of May across the Great Basin, with cooler temperatures and periods of precipitation. Precipitation is likely to move across southern areas of the Great Basin at times, as well. Normal fire potential is expected across the Great Basin through May, which generally indicates a low potential for large wildland fires. However, fire potential may occasionally increase for a burning period in May across northern Nevada and southern Idaho after prolonged warm and dry weather followed by gusty winds where fine dead fuel loading is above normal, even during green-up due to the carryover. Otherwise, green-up will be abundant through May with continued snowmelt due to the longer, warmer days.

The main concern heading into June will be southern areas of Nevada, Utah, and the Arizona Strip in the mid to higher elevations. These areas have seen well below normal snowpack, precipitation, and increasing drought. Moisture will occasionally move across southern areas in the first half May, but unless moisture is well above normal, fuels will dry quickly by late May and June. Monsoon moisture is expected to be a bit more delayed than normal for the southern Great Basin, while uncertainties exist on how far north its extent will be. Therefore, above normal fire potential is likely to continue in southern areas into at least mid-July. However, the far southern areas such as the Arizona Strip are likely to see increasing relative humidity, if not precipitation, by mid-July. Central and northern Utah will be monitored for possible areas of above normal fire potential in July, but confidence is too low to add yet.

Another concern for July will be the lower elevations of northern Nevada into southwest Idaho. These areas have abundant carryover fine fuels from last year and should see a solid crop of new growth from precipitation that has already occurred in the winter and spring, coupled with the additional precipitation forecast the next two weeks. Therefore, above normal fire potential was added for these areas for July. Western Nevada was left as normal fire potential for now, but will be monitored closely as above normal new fine fuel growth from spring rain remains possible. The Salmon-Challis National Forest will also have above normal fire potential for July due to the possibility of warm and dry weather potentially rapidly melting the snowpack and drying fuels. Areas in Idaho farther west toward the Payette are likely to move into above normal fire potential in August, with climate outlooks strongly suggesting prolonged warmth and dryness for most of the summer.

## **Southwest**

Average temperatures over the past thirty days have been above normal in much of New Mexico and southern Arizona, and near to just below normal across the rest of the region west of the Divide. Precipitation over the past thirty days has been well above normal over the northern and western half of Arizona into the eastern half of New Mexico, and well below normal elsewhere. This past winter had one of the lowest snowpacks on record for southern portions of the Continental Divide in New Mexico and Arizona. The snow water equivalent in the Upper Gila

Basin was at or below the minimum snow water equivalent measured over the past 30 years. As of April 29, the US Drought Monitor indicated widespread areas of extreme drought with pockets of exceptional drought focused over the southern and western halves of Arizona and the southern tier of New Mexico, as well as over parts of the northern New Mexico mountains. Areas of severe drought surround both areas and extend across much of the rest of the region. Moderate drought to abnormally dry conditions exist over northeastern New Mexico and northeast Arizona. The Climate Prediction Center Monthly Drought Outlook predicts that drought will persist across all areas.

As of May 1, Energy Release Component (ERC) was above the 90<sup>th</sup> - 97<sup>th</sup> percentile in eastern and southeast Arizona, and southwest, south central, and central New Mexico, and are trending near record maximums for the time of year. Elsewhere ERCs are below the 50<sup>th</sup> - 75<sup>th</sup> percentile. However, due to the variable weather throughout the spring, ERCs continue to fluctuate sharply up and downward, even in the drier areas. Live and dead fuel moisture in parts of the White Mountains and Gila Region are what would be expected during the peak of fire season in mid-June.

Wildfire activity has been low across the region with some prescribed burning still occurring.

Significant fire activity typically peaks in late June into the first half of July due to the high sun angle, frequent hot temperatures, long burn periods, areas of lingering dry air, and increasing thunderstorm activity. In May, large fire activity is normally on the rise due to warming temperatures, overall dry conditions, longer burn periods, and increasing sun angle. However, periodic low-pressure systems will continue to move through the Southwest through much of May, keeping weather variable and fire potential lower, especially over the northern half of the region and over eastern New Mexico. Hotter and drier conditions may return more consistently later in May or in June resulting in fire danger increasing in most areas. Significant fire potential will be highest during breezy, windy, and dry periods focused over southeast and eastern Arizona into southern and central New Mexico in May. Fire potential is expected to increase in June as stronger high pressure aloft develops, with hot and dry conditions and an increase in thunderstorms before the arrival of the North American Monsoon. Fire potential is expected to return to normal in July with the anticipated arrival of the monsoon. However, if the hot temperatures forecast in late spring and early summer is delayed, then the monsoon could be delayed as well, which may push above normal fire potential into July. Normal fire potential is forecast for August as the monsoon is expected to be entrenched across the Southwest.

## **Rocky Mountain**

Above normal significant fire potential is expected in southwest Colorado for June, and northeast Wyoming for August. Otherwise, normal significant fire potential is expected for the Rocky Mountain Area (RMA) through August. April saw more of the RMA near average for temperature, but precipitation remained below normal for most of the area. Drought conditions continue, but the cooler temperatures allowed for some improvements in the northern half of the geographic area.

For the month of April, temperatures were much closer to normal compared to previous months. The West Slope of Colorado remained above normal with most cold fronts not pushing past the Continental Divide. The plains from southeast Colorado into Kansas were also a couple of degrees above normal, with warmer air moving out of the southern Plains. Northern Wyoming observed several cold fronts, dropping temperatures a degree or two below normal. Precipitation continued to be below normal across most of the RMA, though several rounds of precipitation events across Kansas resulted in much of the state being above average. This area of above normal precipitation included much of western Kansas that had been dry over the last several months. Downslope wind events continued to be a regular occurrence through April, with several events producing wind gusts more than 50 mph east of the Rockies. Overall, the near normal temperatures help to slightly improve drought conditions in Wyoming, South



Dakota, and northern Colorado. Drought continued in southern Colorado, western Kansas, and central Nebraska, with small areas of intensifying drought.

Green-up continues to progress, although slowly. Much of the progress came later in the month as more frequent showers and thunderstorms brought increased precipitation. With a slower green-up, fire danger remained elevated with the cured fuels remaining dominant across the landscape. For the West Slope, the prolonged warm, dry conditions is resulting in the larger fuels drying out. 1000-hour fuel moistures on the Uncompahgre National Forest on the central West Slope of Colorado are currently near seasonal minimums.

Initial attack continued to gradually increase across the RMA in April, but most reported fires remained less than five acres. The largest fires were in the finer fuels on the central Plains, and all occurred on days with low humidity and strong winds.

La Niña has ended, with neutral conditions expected to prevail through the outlook period. Temperatures are expected to remain above normal through the outlook, with the highest chance of above normal temperatures centered on the Four Corners region. May will continue to have below normal precipitation across the RMA, although in June southwest Colorado will trend closer to normal. A gradual increase in showers and thunderstorms is expected there as the monsoon starts to develop in the southwestern US. The middle of summer will see the Four Corners region trending above normal for precipitation as monsoon activity is expected to increase. The remainder of the RMA through August will remain below normal for precipitation.

With green-up progressing and increased shower and thunderstorms expected to continue into May, significant fire potential will be normal across the RMA. With drought conditions on the West Slope and increasing thunderstorm activity due to the developing monsoon, southwest Colorado will have increased fire potential in June. Potential will return to normal in July as more frequent showers and thunderstorms develop due to the monsoon. The area of concern going into August will shift towards northeast Wyoming, with continued drought conditions and the forecast of below normal precipitation.

## **Eastern Area**

An extremely varied outcome in rainfall amounts and wildfire activity was observed the past month. The far northwestern portion of the Great Lakes, which is mainly northern Minnesota, has been very dry, with little to no green-up through April. There have been active wildfires as well, demonstrating the dry fuels. This, when combined with the Climate Prediction Center's forecast of near normal temperatures and just below normal to perhaps near normal precipitation, and a slightly delayed green-up, leads to above normal significant fire potential in May. For June through August, green-up may hinder larger fires from occurring, but if warm and dry conditions persist activity may remain above normal through the summer. Normal fire potential is forecast for June through August, currently, mainly due to low confidence.

Well above average rainfall occurred from southern Minnesota and northern Iowa into the majority of Wisconsin and northern Michigan. This recent wetness should keep potential normal for the next four months.

To the south of the swath of wetter than normal rainfall is another area of below normal rainfall. This area includes parts of Iowa and northern Missouri, northern Illinois, southern Wisconsin, northwestern Indiana, and a portion of southern Michigan. However, the long-term forecast calls for equal chances for precipitation and slightly above normal temperatures. With green-up underway, this area is also forecast to have normal potential for the next four months.

To the south of the above-mentioned dry area, a larger, much wetter area can be found from most of Missouri, southern Illinois, southern Indiana, Ohio, West Virginia, and the western quarter of Pennsylvania. Although West Virginia has had several wildfires in April, green-up and the forecast

for wetter conditions should help mitigate in the near term. That, together with a forecast of near to above normal rainfall and green-up should keep those areas at near normal fire activity through August.

Much of the Mid-Atlantic and New England have been dry, resulting in a 15,000-acre wildfire in New Jersey near the end of April. Large fire activity has also occurred recently in central and eastern Pennsylvania, as well as Connecticut. Below normal precipitation is forecast for the next two weeks, as well. However, the longer-term forecast has above normal precipitation, and near normal temperatures for May which should help mitigate the activity for most of this area but elevated concern remains for the Mid-Atlantic coastal area, which includes New Jersey, Maryland, Delaware, and far eastern Pennsylvania. This area has been slow to green-up and has been very dry in some areas. Given the recent fire activity there, and lack of green-up to this point, above normal fire potential is forecast for May. June may also have above normal potential but is kept normal for now and will be reassessed next month. Normal significant fire potential is forecast for July and August.

Well below normal snowpack was observed over the winter in much of the northern tier of the Eastern Area, which affects available surface fuels as the pre-green-up fire season continues. Three fuels drivers are of concern. First, the lack of snowpack means that grass and leaf litter may not be compacted making it more available to ignition sources and drying out quickly. Second, the lack of snowpack and precipitation overall in 2024 and early 2025 has not recharged lakes, ponds, and marshes making lowland grasses and shore vegetation available to burn. Third, these conditions could be combined with the “spring dip” in pine needle live fuel moistures that will occur during May of the outlook period. Periods of above normal fire potential are expected during any hot, dry, windy events in the Eastern Area, the duration determined by the frequency of wetting precipitation events that reach fine dead fuels until green-up is in full swing. Areas of drought are also a concern as even though green-up will occur, it may not be long before curing begins and live fuel moistures drop to levels that cause increased fire behavior later in the summer. This last concern will continue to be monitored in future outlooks.

## **Southern Area**

Spring fire season in the Appalachians is on its last legs heading into early May, with near full leaf-out reported below 3,000 feet and another week or two to go in the higher terrain. The highest elevations of western North Carolina and northern Virginia may be most susceptible to new fires in early May due to lingering drought impacts from winter. Varying levels of short- and long-term dryness and areas of moderate drought still encompass the rest of the Appalachians, and this may have implications in areas most severely impacted by Hurricane Helene if drought intensifies or returns later this summer. Fine dead fuels under a newly opened canopy have the potential to dry out more rapidly in any extended hot and dry patterns, with new understory plants potentially curing out and adding to fuels left behind Helene. Knocked over trees that may still be partially rooted are growing new leaves, and any drought intensification could also make these lofted fuels available later in the year. Most long-range weather guidance points toward a wet summer across Appalachia, so any significant fire potential may not return until the fall fire season, when heavier dead fuels exposed to sunlight all summer may also be more available.

The coastal Southeast is the primary area of concern for the Southern Area in May and potentially well into June. Several fires from Florida to the coastal Carolinas have been ongoing since March, a testament to increasingly parched organic soils or low water levels in the region's swamps. The Standardized Precipitation-Evapotranspiration Index (SPEI) in the 180-day period ending April 25 tells the story of substantial drought in the coastal Carolinas and across most of the Florida peninsula. Extreme conditions due to the combination of well below average rainfall since the end of hurricane season and well above average to near-record evaporative demand. Similarly, Keetch-Byram Drought Index (KBDI) values are tracking at record high levels across the Central Florida, South Florida, North Carolina Coast, and South Carolina Coast Predictive Service Areas (PSAs). Above normal significant fire potential is of highest confidence for these PSAs due to still

worsening drought and expectations for drier than average conditions until the rainy season begins or tropical activity increases. These areas may become especially busy with new fires as wetter conditions first develop, due to the likelihood for lightning ignitions amid highly receptive fuels. Human starts or escapes of longer-term incidents may still be a main contributor to significant fires until then. It would be unusual for widespread drought to persist across the Florida peninsula past early July, but the coastal Carolinas have previously seen lingering drought later into the year, in line with some of this summer's analog guidance. Model guidance supports a wetter scenario by July, however, and early season tropical activity could also bring drought relief to the coastal Southeast.

United States Geological Survey 28-day streamflow observations are closer to normal across the rest of northern Florida into southern Georgia and farther inland across the Carolinas, but conditions have been trending drier recently, and most guidance for May shows a warm and dry month ahead. Hurricane and storm debris fuels are anomalously high in many of these PSAs, which is expected to contribute to above normal significant fire potential into May and June, if not later into the summer in the footprint of last year's Helene and Debby impacts, along with 2023's Hurricane Idalia.

Drier conditions have also recently emerged farther west along much of the Gulf coastal plain. Wildfire activity may certainly pick up in eastern Louisiana, coastal Mississippi and southern Alabama during May, before a wetter pattern likely materializes. Pine mortality and beetle kill, along with recent storm debris could all contribute to increased fire potential during longer stretches of hot and dry weather, but there is less support for long-lived drought. However, analogs and long-range guidance point to increased probabilities of a wet summer and hurricane season along most of the Gulf coastal plain.

Across the Plains, abnormally wet conditions have materialized and are likely to continue into at least the first couple weeks of May. This will result in a robust grass crop across Texas and Oklahoma which could impact the fire environment later this summer as drought likely returns amid abnormally hot conditions. Grass is not a major contributor to large fires in summer across the Plains but can carry fire to the more volatile fuels, especially with cured, above normal grass loads. Above normal significant fire potential is forecast beginning in June across portions of central and southern Texas, where long-term drought is most likely to persist into the hottest part of summer. An expansion into much of the rest of central and eastern Texas and the majority of Oklahoma is expected for July and August, in line with recent research showing summer fire seasons becoming more common and expansive in the region due to decadal warming trends. Flash drought is difficult to predict at this range but still seems likely to impact at least some portions of both states this summer.

The rest of the geographic area will see a typical decrease in significant fire potential now that green-up is in full swing, resulting in normal significant fire potential through the period.

### **Outlook Objectives**

*The National Significant Wildland Fire Potential Outlook is intended as a decision support tool for wildland fire managers, providing an assessment of current weather and fuels conditions and how these will evolve in the next four months. The objective is to assist fire managers in making proactive decisions that will improve protection of life, property, and natural resources, increase fire fighter safety and effectiveness, and reduce firefighting costs.*

**For questions about this outlook, please contact the National Interagency Coordination Center at (208) 387-5400 or contact your local Geographic Area Predictive Services unit.**

**Note:** Additional Geographic Area assessments may be available at the specific GACC websites. The GACC websites can also be accessed through the NICC webpage at:

<http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm>